

REMARKS

Reconsideration of the Office Action of November 1, 2007 is respectfully requested.

Enclosed is a Two-Month Extension of Time with requisite fee.

In the Office Action there is indicated that figures 9, 11, 15, 28-29, 34, 55, 72, 73, 77, 93, 105, 109-110, 113, 134, 146-152, 155-173 and 186 are objectionable under 37 C.F.R. 1.121(d) on the basis that “the figures have views not labeled separately or properly”. This objection is respectfully traversed on the basis that the referenced figures are considered to currently be labeled properly in accordance with 37 C.F.R. 1.84 and 1.121(d). That is, a common theme amongst the above-listed figures is that they include figure label numbers with a number and a capital letter thereafter. This format is respectfully submitted to be an acceptable format under 37 C.F.R. 1.121(d) and 1.84(u). For example, as noted in 37 C.F.R. 1.84(u) which has the heading “Numbering of views”

“partial views intended to form one complete view can be identified by the same number followed by a capital letter.”

Reference is also made to Exhibits A and B from the U.S. Patent and Trademark Office’s “Guide for Preparation of Patent Drawings” (Oct. 1993) showing examples of acceptable number/letter Figure legend combinations. In addition, reference is made to the following issued patents which are inclusive of figure sets having figure legend numbering in common with the present application: U.S. Patent Nos. 7,156,260, 7,222,753, 7,182,221, 7,341,632, 7,331,542, 7,213,383 and 7,211,169.

In view of the above, it is respectfully submitted that the Figure legends contained in the present application are in compliance with 37 C.F.R. 1.121(d) and withdrawal of the objection is respectfully requested.

In the Office Action, claims 31-35, 45 and 48 have been rejected under 35 U.S.C. 112, second paragraph. Present claim 31 now refers to a “chemical feed system” rather than the prior “chemical supply system” and thus claim 31 is respectfully submitted to be in accord with 35 U.S.C. 112, second paragraph and 37 C.F.R. 1.75(c). Also, claims 45 and 48 have been amended to have correct dependencies which also removes the antecedent issue raised relative to “said coupling housing”.

In the present Amendment the claims have been amended as summarized below:

Claims 1-17, 30, 37, 39-40, 42 and 46 have been cancelled with claims 1-17 and 46 being cancelled as being drawn to non-elected subject. The subject matter of claim 30 is now in independent claim 29. The subject matter of claims 37, 39, 40 and 42 are now found in independent claim 36.

Former dependent claims 19, 25 and 27 now are in independent format while various other dependent claims have been amended as well. In addition, new dependent claims 49-57 have been added in this Amendment. As the current claim wording finds support in the original application no new matter is considered introduced. For example, in reference to the below-discussed spacing or passageway between the magnetic coupling component and the shrouds surface, reference is made to the original disclosure on, for example, pages 107-108 inclusive of the discussion of the protective covering and Figs. 78, 83 and 89b (as well as the discussion concerning chemical flow into the chemical reception cavity of the shroud itself).

In the Office Action, the non-withdrawn claims were rejected under the prior art as summarized in the below presented "Table of Rejections".

Ref.	Claims	Statutory Grounds	Reference(s)
A	18-20, 22-25, 28-32, 34-36, 40-45	35 U.S.C. 102(b)	Jeans (4,804,112)
B	18, 19, 21, 27-30, 36 and 40-45	35 U.S.C. 102(b)	Siller (4,321,938)
C	18-20, 22-24, 28-32, 43-45, 47 and 48	35 U.S.C. 102(b)	Newman (5,209,069)
D	36, 37	35 U.S.C. 102(b)	Soudan (2003/0121938)
E	36, 40	35 U.S.C. 102(b)	Ayers et al. (3,017,164)
F	21	35 U.S.C. 103(a)	Jeans in view of Vanderjagt (4,804,109)
G	26	35 U.S.C. 103(a)	Jeans in view of Buse (4,871,301)
H	33	35 U.S.C. 103(a)	Jeans in view of Williamson et al. (6,010,043)
I	37-39	35 U.S.C. 103(a)	Ayers et al. in view of Soudan
J	47 and 48	35 U.S.C. 103(a)	Newman in view of Claassen (4,898,527)

As to independent claim 18, which was rejected under A, B and C, the following discussion is provided as to how the current claim 18 is submitted to be patentably distinguishable over the rejection relied upon in rejections A, B and C.

Reference A concerns a carbonated beverage dispenser wherein, with reference to Figs 1 and 12, chilled water is fed to a chamber 190 and sprayed out of outlet pipes 194. The sprayed water is placed in a CO<sub>2</sub> atmosphere and subjected to paddle wheel contact in an effort to intermingle CO<sub>2</sub> bubbles with the chilled water for subsequent mixing with syrup as it is fed through dispenser 100. Figure 12 shows the paddle wheel's magnetically coupled drive.

Reference B discloses a dosing pump for feeding a quantity of liquid from tank 10 through conduit 14 for release into the water flow. The water flow itself is used to drive the rotary piston of the hydraulic motor (i.e., the pump unit is a hydraulic motor which runs based on the driving flow of fluid passing through the system). The rotary piston drives a shaft which is magnetically coupled to a cam ring that moves a poppet valve up and down to trigger a valve release to expel a dose of the chemical being mixed with the water from container 10.

Reference C concerns the circulating of a cooled, drink beverage wherein the drink beverage is agitated for display purposes. The motor 44 is used to drive pump driver 40 that is magnetically coupled to an impeller above. The impeller has a spider leg threaded member and a rivet like pin extending through a non-magnetic plate to clamp in position an impeller blade set which is magnetically coupled to a magnetic drive disk.

A review of each of references A to C reveals a system that is not a dispenser having an isocyanate feed port as presented in current claim 18. Nor would each of the designs featured in A to C, which are used for mixing non-reactive ingredients, be suited for reactive chemicals in the context of a reactant chemical dispenser. In other words, each of A to C is submitted to be recognizable by one of ordinary skill in the art as not being a dispenser system suited for use with a reactive isocyanate (e.g., the dispenser system in general would not be capable of functioning due to the requirements associated with, for example, a polyurethane dispenser as set forth in the background of the present invention). Nor does the remaining references of record, remedy the deficiencies associated with each of A, B and C described above.

Claim 19 has been written into independent format and features an advantageous arrangement of the claim 19 invention wherein the magnetic member received within the shroud

(and connected to the pump unit for operation of the same) and extends within the shroud in a manner that defines a fluid passageway between the magnetic coupling member (positioned within the shroud and magnetically coupled to a second magnetically coupling member driven by said motor) and the interior of the shroud wall.

A review of the reference reveals that none of A, B and C disclose or suggest such an arrangement. For example, Reference A features a cup-to-cup bearing arrangement (Fig. 12) unlike the claim 19 invention and thus actually teaches away from the arrangement of the present invention for the benefit of added rotation stability via the cup themselves. Reference B has its external magnetic coupling device driven and not functioning as a motor associated driver for the fluid being pumped, while Reference C fails to feature a nested arrangement for its magnetic drive. Nor do the other references of record disclose or suggest such an arrangement.

Claim 25 stands rejected under 35 U.S.C. 102(b) based on Reference A above. Claim 25 includes the above-described chemical fluid spacing as described above and features a bearing arrangement not disclosed or suggested by A which, as noted above, actually teaches away by utilizing the cup-to-cup bearing relationship featured in that reference. The cup-to-cup arrangement in A also teaches away from the asserted modification relying of the referenced noted in G, as the arrangement in A has sufficient bearing stability in its extended cup-to-cup bearing relationship as to not warrant additional bearing requirements.

Claim 27 now is in independent form with an additional indication that the flexible coupling is associated with the second magnetic coupling member which is in the shroud. In the rejection based on Reference B there was reliance on bellows 4 which is not in any way associated with a magnetic coupling member within a shroud.

Claim 29 includes a fluid reception region between the referenced second magnetic coupling member and said shroud which is an arrangement lacking in each of References B and C (for reasons such as those described above that pertain to the issue concerning the relationship set forth in this paragraph).

In addition to referencing claim 29, claim 34 currently references a heater that is featured with the heater hose, which arrangement is not disclosed or suggested by the applied reference rejection A (which specifically describes the advantages with respect to carbonation mixture of having a chilled as opposed to a heated fluid being utilized).

Claim 36 currently includes the features of dependent claims 37, 39, 40 and 42. A review of the rejections above reveals no common rejection was applied relative the present combination of claims. A review of reference combination I (applied against claims 37-39) as well as references A and B reveals fails to disclose the combination of having a releasable/fastener input valve associated with a heated chemical hose feeding to the inlet housing and an inlet manifold flow stopper which activated upon release of the input valve mechanism.

Claim 42, which was rejected based on rejections A and B above describes the chemical flow between an exterior surface of a magnetic coupling device and an adjacent interior surface of the shroud which, as described above, is not disclosed or suggested by the prior art.

Lastly, claim 47 among other things, describes a magnetic coupling member within the shroud and having a coating layer that is suited to protect the magnetic material from isocyanate contact.

In view of the foregoing amendments and remarks, it courteously is urged that all of the remaining claims are allowable and that this application is in condition for allowance. Favorable action in this regard earnestly is solicited.

If any fees are due in connection with the filing of this Amendment, such as fees under 37 C.F.R. §§1.16 or 1.17, please charge the fees to Deposit Account 02-4300; Order No. 034017R004.

Respectfully submitted,

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# Guide for the Preparation of Patent Drawings

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**U.S. DEPARTMENT OF COMMERCE**

Ronald H. Brown  
Secretary



**PATENT AND TRADEMARK OFFICE**



Bruce A. Lehman  
Assistant Secretary of Commerce and  
Commissioner of Patents and Trademarks

October 1993



## Example 10

Example 10 is a **proper** illustration of a graphical form which is used to represent optical aberrations of lenses which may be submitted as drawings. The drawing meets the requirements of

### Paragraph (d) Graphic forms in drawings

The drawing also meets the requirements of

- Paragraph (a)(1) Black ink.
- Paragraph (l) Character of lines, numbers, and letters.
- Paragraph (o) Legends.
- Paragraph (p) Numbers, letters, and reference characters.
- Paragraph (q) Lead lines.
- Paragraph (u) Numbering of views.

FIG.7A

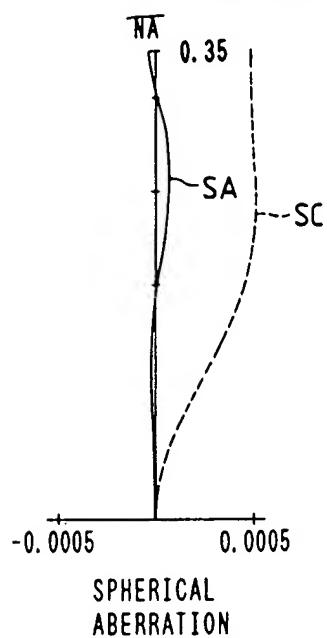


FIG.7B

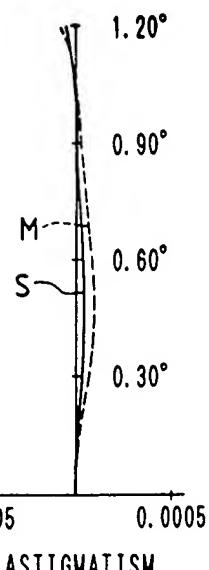


FIG.7C

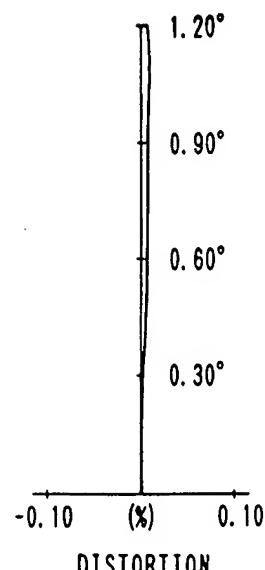


FIG.8A

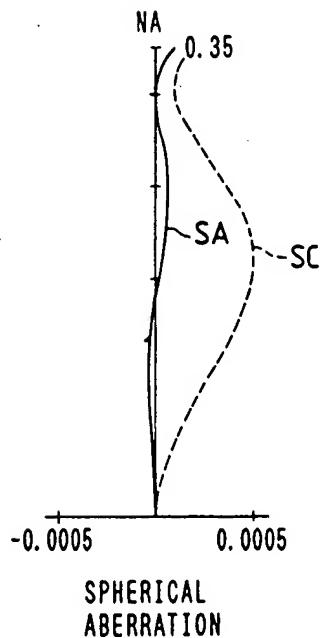


FIG.8B

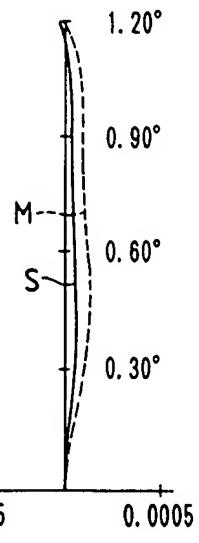
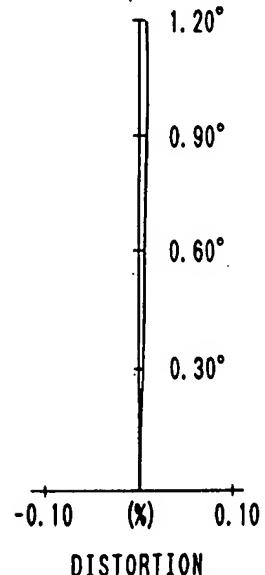


FIG.8C



**Example 10 - Proper  
Paragraph (d). Graphic forms in drawings.**



## Example 35

Example 35 is a **proper** illustration of a drawing which depicts acceptable shading for curved surfaces in element 28c. Further, although it is not required, elements 3 and 11 are also lightly shaded to show that they are surfaces, even though not curved surfaces. This is acceptable as long as it helps to understand the invention. The drawing meets the requirements of

### Paragraph (m) Shading

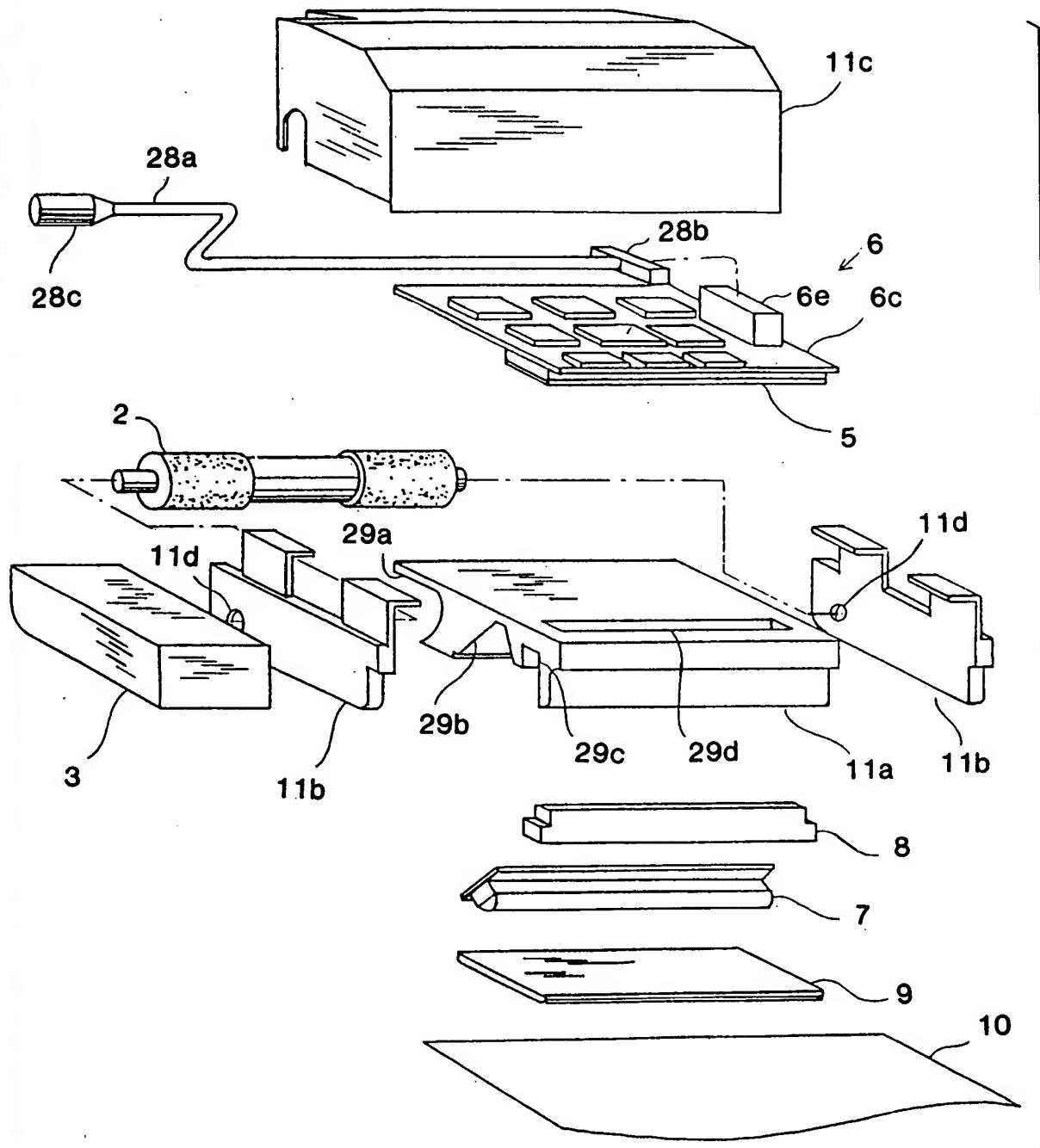
Additionally, the drawing meets the requirements of

Paragraph (a)(1)	Black ink.
Paragraph (h)(i)	Exploded views.
Paragraph (l)	Character of lines, numbers, and letters.
Paragraph (p)	Numbers, letters, and reference characters.
Paragraph (q)	Lead lines.
Paragraph (r)	Arrows.
Paragraph (u)	Numbering of views.

Other **proper** illustrations are shown at Examples 32 through 34 and 36 through 38.



FIG. 2A



Example 35 - Proper  
Paragraph (m). Shading.